

IN THE SPECIFICATION:

Please amend paragraphs [0019], [0063], [0076], and [0078], as follows.

[0019] FIG. 1 is a schematic representation of a wafer processing system 35 that can be used to perform integrated circuit fabrication in accordance with embodiments described herein. The wafer processing system 35 typically comprises process chambers 36, 38, 40, 41, transfer chamber 50, load-lock chambers 52, a factory interface 46, a microprocessor controller [[54]] (not shown), along with other hardware components such as power supplies (not shown) and vacuum pumps (not shown). An example of such a wafer processing system 35 is an ENDURA SL system, available from Applied Materials, Inc., Santa Clara, California.

[0063] Suitable tungsten-containing precursors for forming the tungsten nucleation layer may include for example, tungsten hexafluoride (WF_6) and tungsten carbonyl ($W(CO)_6$), among others. Suitable reducing gases may include for example, silane (SiH_4), disilane (Si_2H_6), dichlorosilane ($SiCl_2H_2$), borane (BH_3), diborane (B_2H_6), triborane (B_3H_9), tetraborane (B_4H_{12}), pentaborane (B_5H_{15}), hexaborane (B_6H_{18}), heptaborane (B_7H_{21}), octaborane (B_8H_{24}), ~~nanoborane (B_9H_{27})~~ nonaborane, and decaborane ($B_{10}H_{30}$), among others.

[0076] SAMPLE B had a surface roughness R_a of about 4.27 nm (nanometers), a root mean square roughness R_{rms} of about ~~5.76~~ 5.39 nm and a maximum roughness R_{max} of about 37.65 nm. Such values for the surface roughness provide a smooth surface morphology for the composite tungsten film that is sufficient for subsequent lithography steps performed thereover.

[0078] For SAMPLE A, each of the tungsten nucleation layers and the tungsten bulk layers were formed in separate process chambers according to the process parameters described above with respect to SAMPLE B. SAMPLE A had a surface roughness R_a of about 4.27 4.58 nm, a root mean square roughness R_{rms} of about ~~5.39~~ 5.76 nm and a maximum roughness R_{max} of about 42.74 nm. Such values for the surface roughness

provide a smooth surface morphology for the composite tungsten film that is sufficient for subsequent lithography steps performed thereover.